

**Technical Data Sheet**

Page 1 of 2

- Properties:** AKEMI® Marble Filler 1000 Universal is a liquid, creamy 2-component product based on unsaturated polyester resins dissolved in styrene containing mineral filling agents.
- The product is distinguished by the following qualities:
- good working properties on horizontal surfaces due to liquid, creamy consistency
  - fast hardening (20 - 40 minutes)
  - good working properties (grinding, milling, drilling)
  - excellently polishable
  - very good adhesion on natural stones also at higher temperatures (70 - 80°C; in case of low exposure to strain: 100 - 110°C)
  - resistant to water, petrol and mineral oils
- Application Area:** AKEMI® Marble Fillers 1000 Universal is mainly used in stone processing industry for filling and bonding natural stone. Due to their liquid, creamy consistency the product is suited to fill small and middle-size holes or fissures and to bond horizontal surfaces.
- Instructions for Use:**
1. The surface to be treated must be clean, completely dry and roughened.
  2. Colouring is possible by adding AKEMI® Polyester Colouring Pastes, Colouring Concentrates liquid or Spectrum Pastes up to max 5%. Dilution is possible in any ratio by adding AKEMI® Marble Filler 1000 transparent extra liquid.
  3. Add 1 to 4 g of white hardener paste to 100 g of filler (4 to 5 cm of paste pressed out of the screw tube correspond to 1 g).
  4. Mix both components thoroughly. The mixture can be worked for approx. 3 to 10 minutes (20°C).
  5. After 15 to 35 minutes the treated parts can be further processed (grinding, milling, drilling).
  6. The hardening process is accelerated by heat and delayed by cold.
  7. Tools can be cleaned with AKEMI® Nitro-Dilution.
- Special Notes:**
- For professional use only.
  - Use afin® Liquid Glove to protect your hands.
  - Hardener portions higher than 4% reduce adhesion and deteriorate surface drying.
  - Hardener portions less than 1% and low temperatures (below 5°C) considerably delay hardening.
  - The bonding layers should be as thin as possible (< 2 mm) due to shrinkage (approx. 2 - 3%) caused by the high reactivity of the filler and development of heat during the hardening process.
  - Non-durable resistance of bondings which are frequently exposed to humidity and frost.
  - Only moderate adhesion on fresh, alkaline building materials (e.g. concrete, concrete bricks).
  - The hardened filler tends to yellowing.
  - Once hardened, the filler can no longer be removed by solvents. Removal is only possible mechanically or by higher temperatures (> 200°C).
  - Being worked properly, the hardened filler is generally recognized as not injurious to health.
  - Recycling in accordance with the guidelines of EU Decision 97/129 EC on the Packaging Directive 94/62/EC.

TDS 11.22

**Technical Data Sheet**

Page 2 of 2

**Technical Data:** Colours: jura-yellow, white, black

Density: 1.70 - 1.75 g/cm<sup>3</sup>

Working time (min.):

a) at 20°C

1% of hardener: 8 - 10

2% of hardener: 5 - 6

3% of hardener: 4 - 5

4% of hardener: 3 - 4

b) with 2% of hardener:

at 10°C: 10 - 12

at 20°C: 5 - 6

at 30°C: 2 - 3

Mechanical Properties:

Tensile strength DIN EN ISO 527: 20 - 25 N/mm<sup>2</sup>

Compressive strength DIN EN ISO 604: 90 - 100 N/mm<sup>2</sup>

Bending strength DIN EN ISO 178: 35 - 45 N/mm<sup>2</sup>

**Storage:** If stored in dry and cool condition (5-25°C/41-77°F) in its closed original container at least 12 months from production.

**Health & Safety:** Read Safety Data Sheet before handling or using this product.

**Important Notice:** The above information is based on the latest stage of development and application technology. Due to a multiplicity of different influencing factors, this information – as well as other oral or written technical advises – must be considered as non-binding hints. The user is obliged in each particular case to conduct performance tests, including but not limited to trails of the product, in an inconspicuous area or fabrication of a sample piece.

TDS 11.22